

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~Echo canceling~~ A method, comprising: the
steps:
 - a) ~~receiving a first signal and a second signal, said second signal comprising an echo of the first signal, signal;~~
 - b) ~~generating an echo replica signal by filtering the first signal with a finite impulse response filter, said finite impulse filter using a filter coefficient vector for generating the echo replica signal, signal;~~
 - e) ~~generating an echo-cancelled~~ canceled ~~signal by subtracting the echo replica signal from the second signal, signal;~~
 - d) ~~determining a measure of interference within the second signal, signal;~~
 - e) ~~determining a step vector depending on said measure of interference,~~
wherein an increasing the measure of interference continuously reduces a size of the step vector,
vector and determining the step vector comprises:
 - generating a first step vector adapted to improve the filter coefficient
vector, as if the second signal is not affected by interference;
 - generating a second step vector depending on said measure of
interference; and
 - selecting the step vector from the first and second step vectors, wherein
the selected step vector is the smallest of the first and second step vectors; and
 - f) ~~updating the filter coefficient vector by the step vector.~~

2. (Canceled)

3. (Currently Amended) ~~Echo canceling~~ _____ The method according to claim ~~2~~, 1 wherein the second step vector ~~substantially~~ corresponds to the first step vector in the absence of interference on the second signal.

4. (Currently Amended) ~~Echo canceling~~ _____ The method according to claim ~~3~~, 3 wherein the second step vector continually decreases, if the measure of interference increases, such that the size of the second step vector becomes smaller than the size of the first step vector.

5. (Currently Amended) ~~Echo canceling~~ _____ The method according to claim ~~1~~, 1 wherein the measure of interference is determined using a level of the ~~echo-cancelled~~ canceled signal.

6. (Currently Amended) ~~Echo canceling~~ _____ The method according to claim ~~1~~, 1 wherein the step vector is determined depending on a total echo return loss.

7. (Currently Amended) ~~Echo canceling~~ _____ The method according to claim ~~5~~, 6, comprising: ~~the steps:~~

_____ detecting whether a double talk situation is present; ~~or not~~, and

_____ determining the total echo return loss differently depending on whether the double talk situation is present; ~~or not~~.

8. (Currently Amended) ~~Echo canceling~~ _____ The method according to claim ~~6~~, 6 wherein the measure of interference is determined using a weighted level of the ~~echo cancelled~~ canceled signal, said weighted level of the ~~echo cancelled~~ canceled signal consisting of the level of the ~~echo cancelled~~ canceled signal multiplied by the total echo return loss.

9. (Currently Amended) ~~Echo canceling~~ A device, comprising:

——a finite impulse response filter adapted to receive a first signal and to output an echo replica signal, said finite impulse response filter using a filter coefficient vector for generating the echo replica ~~signal, signal;~~

——a subtraction circuit for subtracting the echo replica signal from a second signal comprising an echo of the first ~~signal, signal;~~

——a coefficient update circuit for iteratively updating the filter coefficient vector by a step ~~vector, vector;~~

——a means for determining a measure of interference within the second ~~signal, signal; and~~

——a means for determining the step vector depending on the measure of interference, wherein an increasing the measure of interference continuously reduces a size of the step vector, vector and the means for determining the step vector includes:

means for generating a first step vector adapted to improve the filter coefficient, as if the second signal is not affected by interference;

means for generating a second step vector depending on the measure of interference; and

means for selecting a smallest of the first and second step vectors as the determined step vector.

10. (New) The device of claim 9 wherein the means for generating the second step vector is configured to continually decrease the second step vector when the measure of interference increases, such that the size of the second step vector becomes smaller than the size of the first step vector.

11. (New) The device of claim 9 wherein the means for determining the measure of interference is configured to determine the measure of interference using a level of an echo canceled signal produced by the subtraction circuit.

12. (New) The device of claim 9 wherein the means for determining the step vector comprises means for determining a total echo return loss.

13. (New) The device of claim 12 wherein the means for determining the step vector comprises means for detecting a double talk situation and the means for determining the total echo return loss is configured to determine the total echo return loss differently depending on whether the double talk situation is detected.

14. (New) The device of claim 12 wherein the means for determining the measure of interference is configured to determine the measure of interference using a weighted level of the echo canceled signal, said weighted level of the echo canceled signal consisting of the level of the echo canceled signal multiplied by the total echo return loss.

15. (New) A device, comprising:
a finite impulse response filter configured to receive a first signal and to generate an echo replica signal using a filter coefficient vector;
a subtractor configured to subtract the echo replica signal from a second signal which is an echo of the first signal;
an interference measurer configured to generate an indication of interference within the second signal; and
a step vector generator configured to:
generate a first step vector as if the second signal is not affected by interference;
generate a second step vector depending on the generated indication of interference; and
select a smallest of the first and second step vectors; and
a coefficient updater configured to iteratively update the filter coefficient vector by the selected step vector, wherein coefficient updating continues when the indication indicates an increased level of interference.

16. (New) The device of claim 15 wherein the step vector generator is configured to decrease the second step vector when the indication of interference increases, such that a size of the second step vector becomes smaller than a size of the first step vector.

17. (New) The device of claim 15 wherein the interference measurer is configured to generate the indication of interference using a level of an echo canceled signal generated by the subtractor.

18. (New) The device of claim 15 wherein the interference measurer is configured to determine a total echo return loss.

19. (New) The device of claim 18 wherein the interference measurer is configured to detect double talk and to determine the total echo return loss differently depending on whether double talk is detected.

20. (New) The device of claim 18 wherein the interference measurer is configured to generate the indication of interference using a weighted level of the echo canceled signal, said weighted level of the echo canceled signal consisting of the level of the echo cancelled signal multiplied by the total echo return loss.

21. (New) The device of claim 15 wherein the step vector generator is configured, when the indication indicates a lack of interference, to generate a second step vector having a size which is not significantly smaller than a size of the first step vector.

22. (New) A communication system, comprising:
a receive path;
a transmit path; and
an echo canceling device coupled to the receive path and the transmit path and
having:

a finite impulse response filter configured to receive a first signal and to generate an echo replica signal using a filter coefficient vector;

a subtractor configured to subtract the echo replica signal from a second signal which is an echo of the first signal;

an interference measurer configured to generate an indication of interference within the second signal; and

a step vector generator configured to:

generate a first step vector as if the second signal is not affected by interference;

generate a second step vector depending on the generated indication of interference; and

select a smallest of the first and second step vectors; and

a coefficient updater configured to iteratively update the filter coefficient vector by the selected step vector, wherein coefficient updating continues when the indication indicates an increased level of interference.

23. (New) The system of claim 22 wherein the step vector generator is configured to decrease the second step vector when the indication of interference increases, such that a size of the second step vector becomes smaller than a size of the first step vector.

24. (New) The system of claim 22 wherein the interference measurer is configured to generate the indication of interference using a level of an echo canceled signal generated by the subtractor.

25. (New) The system of claim 22 wherein the step vector generator is configured to determine a total echo return loss.

26. (New) The system of claim 25 wherein the step vector generator is configured to detect double talk and to determine the total echo return loss differently depending on whether double talk is detected.

27. (New) The system of claim 25 wherein the interference measurer is configured to generate the indication of interference using a weighted level of the echo canceled signal, said weighted level of the echo canceled signal consisting of the level of the echo cancelled signal multiplied by the total echo return loss.